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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/385,574	08/30/1999	TAKAO OGAWA	0186-13	9361

7590

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EXAMINER

THOMPSON, CAMIE S

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/385,574

Applicant(s)

OGAWA ET AL.

Examiner

Camie S Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed on June 9, 2003 have been acknowledged.
2. Examiner acknowledges amended claims 1 and 6.
3. The objection to claim 6 is withdrawn due to applicant's amended claim 6.
4. The rejection of claim 6 under 35 U.S.C. 112, second paragraph is withdrawn due to applicant's amended claim 6.
5. The rejection of claims 1-4 and 6-7 under 35 U.S.C. 103(a) as being unpatentable over Matsubara, U.S. Patent Number 5,202,715 in view of Takahashi et al., U.S. Patent Number 6,001,465 is withdrawn due to applicant's argument.
6. The rejection of claim 2 under 35 U.S.C. 103 (a) as being unpatentable over Matsubara, U.S. Patent Number 5,202,715 in view of Takahashi et al., U.S. Patent Number 6,001,465 and in further view of Takuya, JP 09-274218 is withdrawn due to applicant's argument.

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1-2, 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara, U.S. Patent Number 5,202,715 in view of Takuya, JP 09-274218.

Matsubara discloses a plate member used in light shielding blades comprising at least one resin intermediate layer composed of a resin matrix with uni-directionally oriented carbon fibers (substrate and light-shield coating) and at least one reinforced-resin surface layer on both sides of the intermediate layers including carbon fibers uni-directionally (parallel) arranged in an orthogonal direction to that of the carbon fibers in the intermediate layers (see column 1, lines 20-30). The reference discloses that the intermediate and surface layers are composed of a thermosetting resin (see column 3, lines 25-26 and line 44-47). Additionally, the reference discloses that the carbon black may be selectively added to either the prepreg sheets of the surface layers or only to the prepreg sheets of the intermediate layers (see column 4, lines 1-5). The three intermediate layers may include a substrate and two other intermediate layers surrounding the intermediate-substrate layer and carbon black may be selectively added to the other two intermediate layers and not to the substrate layer in order to yield an optical density of zero for the intermediate-substrate layer. Also, the reference discloses that a black lubricant coating may cover the layered structure in order to improve light shielding (see column 4, lines 6-12). Additionally, the reference discloses that 10 weight percent of carbon black is used in the intermediate layers (see column 4, lines 60-63 and column 6, lines 12-16). The reference does not show that the two intermediate layers contain 20-40 weight percent of carbon black. This is an optimizable feature. The carbon black fills the gaps and improves the light shielding properties. Discovery of optimum values of a result effective variable involves only routine skill in the art in re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

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The Matsubara reference does not disclose that the intermediate substrate layer comprises polyethylene terephthalate or is free from reinforcing fibers. Takuya teaches a light shieldable film for an optical apparatus. Additionally, Takuya teaches that the substrate material comprises a biaxially stretched polyethylene terephthalate film, which is free of reinforcing fibers. The absence of reinforcing fibers permits the substrate to be lightweight. Therefore, it would have been obvious to one of ordinary skill in the art to use a PET film free of reinforcing fibers in order to provide a lightweight shading film that is thermal resistant and durable (see Takuya paragraphs 8-10).

9. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara, U.S. Patent Number 5,202,715 in view of Takuya, JP 09-274218 and in further view of Takeshi et al., JP 10-158417.

Matsubara and Takuya are relied upon as above. Neither Matsubara nor Takuya disclose that the reinforcement fibers in the reinforcement member comprise polyparaphenylene benzobisoxazole. Takeshi teaches a prepreg formed from a thermosetting resin with poly-p-phenylenebenzobisoxazole fibers for reinforcement. The poly-p-phenylenebenzobisoxazole fibers are characteristically strong fibers. Therefore, it would have been obvious to one of ordinary skill in the art to use the poly-p-phenylenebenzobisoxazole fibers of the Takeshi reference in the Matsubara and Takuya reference in order to obtain a shield blade material that is tough and impact resistant.

*Response to Arguments*

10. Applicant's arguments filed June 9, 2003 have been fully considered but they are not persuasive. Applicant argues the combination of Matsubara with Takahasi. The rejection based on the combinations of Matsubara and Takahasi have been withdrawn. Independent claim 1 is not patentable because claim 1 is obvious over Matsubara and Takuya. Both references are drawn to light shielding materials for optical apparatus, and thus are analogous art. Both Matsubara and Takuya use thermosetting resins as the material for the film. The combination of Matsubara and Takuya is obvious in order to obtain a lightweight, thermal resistant blade material. Therefore, the arguments are moot due to new grounds of rejection for independent claim 1.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (703) 305-4488. The

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examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (703) 308-0449. The fax phone numbers for the Group are (703) 872-9310 {before finals} and (703) 872-9311 {after finals}.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

  
DEBORAH JONES  
SUPERVISOR PATENT EXAMINER